United States Government Department of Energy

memorandum

Idaho Operations Office

Date: January 31, 2003

Subject: Annual National Environmental Policy Act Planning Summary (TS-ETSD-03-011)

To: Beverly A. Cook, Assistant Secretary
Environment, Safety and Health

In accordance with DOE Order 451.1B, the Department of Energy Idaho Operations Office is submitting its 2003 Annual National Environmental Policy Act (NEPA) Planning Summary, which includes; the Idaho National Engineering and Environmental Laboratory and Grand Junction Office. The 2003 Annual NEPA Planning Summary has also been made available to the public, Estimated NEPA document costs are provided for actions that are well enough defined from a planning and budget perspective.

Our highest NEPA compliance program priority for 2003 is to issue a Record of Decision (ROD) for the Final Idaho High Level Waste and Facilities Disposition Environmental Impact Statement (EIS). We will work closely with the Office of NEPA Policy and Assistance and other HQ organizations to coordinate and streamline the review and concurrence process on this ROD to the extent we can,

If you have any questions concerning the attachment or DOE-ID's NEPA compliance program, please contact our NEPA Compliance Officer, Roger Twitchell, at (208) 526-0776.

Warren E. Bergholz, Jr.
Acting Manager

Attachment

cc: C.M. Borgstrom, EH-42

DEPARTMENT OF ENERGY
IDAHO OPERATIONS OFFICE
ANNUAL NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PLANNING SUMMARY

January 2003

1. BACKGROUND

Preparation of an Annual NEPA Planning Summary (the Planning Summary) is a requirement of DOE Order 45 1 .1B. This Order establishes internal agency requirements and responsibilities for implementing NEPA. The Planning Summary is prepared as a means of informing the public and other DOE elements of (1) the status of ongoing NEPA compliance activities, (2) any environmental assessments expected to be prepared in the next 12 months, (3) any environmental impact statements expected to be prepared in the n&t 24 months, and (4) the estimated cost and schedule for completion of each NEPA review identified. The Planning Summary also periodically includes an evaluation of whether a site-wide EIS would facilitate future NEPA compliance efforts, In addition to these requirements, the Planning Summary identifies NEPA documents across DOE that may affect the DOE Idaho Operations Office (DOE-ID) or the Idaho National Engineering and Environmental Laboratory (INEEL). DOE's Grand Junction Office, located in Grand Junction, Colorado, is organizationally under DOE-ID, The Grand Junction Office Annual NEPA Planning Summary is included.

The following provides information concerning t&relationship of past NEPA reviews and events with the current NEPA compliance situation for DOE-ID and the INEEL.

The Record of Decision for the DOE Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Final Environmental Impact Statement (PSNF & INEL EIS) was issued May 30, 1995. That EIS Record of Decision implemented alternatives for the DOE national spent nuclear fuel program and for INEEL environmental restoration and wastemanagementprograms.

The State of Idaho sued DOE, alleging the environmental impact statement was inadequate and that NEPA had been violated. The lawsuit was resolved in what became known as the Idaho Settlement Agreement. On October 17, 1995, the Federal District Court entered an order that incorporated as requirements all the terms and conditions of the Idaho Settlement Agreement.

With issuance of the Record of Decision for the Idaho High Level Waste and Facilities Disposition EIS (described below) all necessary NEPA documentation will have been completed to implement the actions identified in the Idaho Settlement Agreement. This does not preclude the possible preparation of future supplemental NEPA documentation if there are significant new or unanticipated environmental conditions or factors.

2. STATUS OF ONGOING NATIONAL ENVIRONMENTAL POLICY ACT REVIEWS

Idaho High-Level Waste and Facilities Disposition EIS

High-level waste results from reprocessing spent nuclear fuel and is highly radioactive. It includes liquid waste produced directly from reprocessing and any solid waste derived from that liquid. At the INEEL, high-level waste exists in a solid form called calcine. In addition to the calcine, reprocessing and decontamination operations at the Idaho Nuclear Technology and Engineering Center (INTEC) generated radioactive liquid referred to as sodium bearing waste. The calcine is stored in bin sets and the sodium bearing waste is stored in underground tanks at INTEC.

The Idaho High-Level Waste EIS analyzes alternatives for the treatment and management of calcine and sodium-bearing waste including their characteristics, disposition, and transportation of the final waste forms. The EIS also analyzes disposition and closure alternatives for high-level waste treatment and storage facilities at INTEC such as the New Waste Calcining Paoility, underground storage tanks, and calcine storage bin sets. The Idaho High-Level Waste EIS Notice of Intent, published in the Federal Register September 19, 1997 (62 FR 49029), provided background information, stated the purpose and need, and described the proposed action and agency identified alternatives.

Public scoping for the EIS was conducted from September 19, 1997, through November 24, 1997, during which time public scoping meetings were held in Idaho Falls and Boise, Idaho. In September 1998, the State of Idaho became a cooperating agency in the preparation of the Idaho High-Level Waste EIS. A notice of availability of the draft EIS was published in the Federal Register on January 21, 2000 (65 FR 3432). The public was provided opportunity to comment in writing and at meetings in Idaho Falls, Pocatello, Twin Falls, Fort Hall, and Boise, Idaho; Jackson, Wyoming; Portland, Oregon; and Pasco, Washington. DOE initially scheduled a 60-day public comment period on the Draft EIS ending March 20, 2000. In response to public request, the comment period was extended 30 days, to April 19, 2000.

In its 200 1 Annual NEPA Planning Summary, DOE planned to complete the Final EIS by mid 200 1 and issue a record of decision approximately 30 days later, In September 2001, DOE placed the Final EIS on hold pending a review of the alternatives in light of a DOE top-to-bottom review of environmental management programs, A primary purpose was to make sure the range of alternatives analyzed in the EIS was broad enough to provide the basis for performance-based decisions, rather than a decision tied to a single technology, DOE completed its review in January 2002 and resumed work on finalizing the EIS with an orientation toward a performance-based preferred alternative. In the Final EIS, the State of Idaho and DOE identified separate preferred alternatives for waste treatment, but identified the same preferred alternative for facilities disposition, The state identified direct vitrification as its preferred waste treatment alternative. The final EIS indicates there is no environmental or health and safety risk basis for selecting one action alternative technology or option over another bccause the environmental impacts would be about the same. Therefore, DOB's preferred alternative for the treatment of sodium bearing waste is to select from among the options and technologies analyzed in the EIS based on performance factors such as data from demonstration scale testing, technical maturity, cost and schedule, ability to meet compliance dates, and public input.

The Final Idaho High Level Waste EIS, dated September 2002, was issued concurrent with the BPA Notice of Availability published in the Federal Register October 11, 2002. DOE plans a phased decision making process to implement the proposed action and the elements of its preferred alternative. The phased decision making

process will involve more than one EIS record of decision and include public involvement in the phase that includes selection of the technology or option to be implemented for the treatment of the sodium-bearing waste. In the technology selection phsee, DOE will focus *on four technologies analyzed in the High-Level Waste EIS for implementation. These are: calcination, steam reforming, cesium extraction, and evaporation to dryness. DOE will focus on these four technologies because it appears they are most likely to meet the stated performance criteria, but this does not preclude the selection of one of the other technologies or options analyzed in the EIS. DOE plans to issue the first record of decision in the phased decision making process on the High-Level Waste EIS in early 2003. The initial record of decision will describe the phased decision making process and schedule, decide on actions such as closure of high-level waste tanks, and describe the public involvement and evaluation processes that will be used in selecting and implementing a sodium-bearing waste treatment technology,

Preparation of the Idaho High-Level Waste EIS was awarded under DOE's National NEPA Contract with portions awarded under local support service contracts. The cost of the Idaho H&b-Level Waste EIS is estimated to be about $1 S million, This amount includes environmental impact analyses, and document preparation as well as preliminary engineering, design review and validation, facility planning, public involvement, and waste characterization costs.

Remediation of the Moab Uranium Mill Tailings Site in Grand County, Utah EIS

In November 2002, DOE-HQ determined that an EIS is the appropriate level of NEPA documentation for the Moab, Utah Uranium Mill Tailings Radiation Control Act Project. The scope of the EIS will include sit8 tailings, ground water remediation, and surface remediation of vicinity properties. A Notice of Intent was published in the Federal Register on December 20, 2002. DOE is currently working with federal and state agencies to determine their possible roles as cooperating agencies. Public scoping meetings were from January 21 – 28, 2003. DOE anticipates the EIS to be completed by September 2004. Estimated EIS budget has not been determined.

Wildland Fire Management Plan/Environmental Assessment

A series of wildfires between 1994 and 2000 burned about 136,000 acres on thc INEEL. Other large area wildfires occurred on the Snake River Plain and near the INEEL during this same period, These fires burned primarily in the sagebrush steppe vegetation type. Sagebrush (*Artemisia spp.*) is killed by fire, and when large areas are burned, is slow to recover. Burned areas are vulnerable to erosion and invasion by weedy species, especially cheatgrass. Actions taken during and following wildland fires can have a profound effect on cultural resources and wildlife habitat. Large areas of Sagebrush Steppe throughout the western U.S. have been permanently converted to cheatgrass by recurrent fire and poor land management and grazing practices.

On January 17, 2001, the DOE-ID manager signed a determination to prepare an environmental assessment to evaluate pre-fire planning, fire response, and post fire restoration alternatives. Actions to be analyzed include firebreak construction and maintenance, dust suppression, habitat rehabilitation and impacts on cultural resources. A notice was mailed in December 2001 to the public announcing the availability of the upcoming draft. The draft plan/EA was released for public review and the 30-day public comment period ended on October 16, 2002. DOE has considered public comments on the draft plan/EA and is in the prooess of completing the Final plan/EA. DOE anticipates the final plan/EA and associated Finding of No Significant Impacts to be completed before the 2003 fire season. The INEEL Management and Operating contractor, BBWI, is preparing the plan/EA; the cost is estimated to be about $120,000.

Environmental **Assessment** for the **Deactivation,** Decommissioning and **Dismantlement** of the **CPP-603** Basin **Project**
CPP-603 is located **on** the **INEEL** at **INTEC.** The **proposed** action would deactivate the spent nuclear **fuel** storage basins in a portion of **Bldg.** CPP-603 known as the Fuel Storage and Receiving Facility **(FSRF).** In addition, the proposed action would **dismantle** the Fuel **Element** Cutting Facility and other equipment associated with spent nuclear fuel **storage** operations. The **draft EA** evaluated **alternatives** for disposal of the 1.5 million gallons of water in the spent nuclear **fuel storage basins** and disposal of wastes **generated** by the dismantlement and decontamination of facilities and equipment. The analysis of residual **contaminants** was **integrated** with the facility disposition analysis in the Idaho High-Level **Waste EIS described** above.

On November **8, 2000,** the DOE-ID manager signed a determination to prepare this EA. A notice that **the Draft** EA would be available for public review and **comment** was mailed in January **2001.** The **Draft EA was** released for **30-day** public review and comment in June 2001. At **public request** the **comment** period **was** extended **to** September **23, 2001. After** the **comment** period ended, ongoing data gathering activities **(scanning** of the *603* basin) indicated **radioactive** "hot spots" in the sludge at the bottom of the 603 basin, The EA was **cancelled** in late 2002 pending **further** characterization of the sludge and hot spots and it is expected **the action will** now be addressed under the Comprehensive Environmental **Response, Compensation** and Liability Act **documentation** process,

Environmental Assessment for Ground Water Compliance at the New Rifle, CO, UMTRA Site
The EA was initiated in October 2001, DOE then determined that **a** pilot study for vanadium, one of the contaminants of potential **concern;** was necessary prior to **submitting** the **Draft EA** to the **public** for **comment.** Additional data has since been gathered for vanadium and the compliance strategy (i.e., proposed action) will be no rernediation and the application of alternate **concentration limits,** with institutional controls and monitoring as best management practices. Monitoring during **the** past **several years** reveals **that** vanadium is naturally attenuating at a **rate** that may allow a **change** in the **compliance** strategy to monitored natural attenuation, **The** EA process was initiated **with** the. Albuquerque Office and **will** be concluded with that **office.** DOE **expects** the **EA** to be completed in the Spring 2003 at an approximate cost **of** $21,000,

Environmental **Assessment for Ground Water Compliance at the Slick Rock, CO, UMTRA Site**
In **August** 2002, **following** a meeting of the DOB-ID and **Grand Junction** Office **NEPA Planning** Boards, the GJO **Manager** determined that an **EA** is the appropriate level of **NEPA documentation** to select the ground **watcr** compliance strategy for the site. The **EA** is tiered to **the *Final Programmatic Environmental Impact Statement for the Uranium Mill Tailings Remedial Action Ground Water Project*** (October **1996)** and will comply with ground water standards **as** set forth in 40 **CFR** 192. **The EA** is currently being reviewed by **stakeholders** and is **planned** for completion in **February *2003*** at an **approximate** cost of $18,000.

Environmental **Assessment for Ground Water** Compliance at the **Naturita,** CO, **UMTRA** Sfte
In January 2003, following a meeting of the **DOE-ID and** Grand Junction **Office NEPA** Planning **Boards,** the GJO Manager determined that an **EA** is the appropriate **level** of **NEPA documentation** to **select** the **ground** water **compliance** strategy for **the** site, The **EA** is tiered to the ***Final Programmatic Environmental Impact Statement for the Uranium Mill Tailings Remedial Action Ground Water Project*** (October 1996) and will **comply** with ground water standards **as** set forth in **40 CFR** 192. The draft **EA** is anticipated to be available for public comment in **late** February 2003, and is **planned** for completion in May 2003 at an approximate **cost of $20,000.**

Amended Finding Of No Significant Impact (FONSI) for the Remediation of Non-aqueous Phase Liquids (NAPL) at the Pinellas, Fiorida Star Center, Northeast Area – Area B
An EA and FONSI were completed in 1995 to conduct Resource Conservation and Recovery Act corrective actions at the Pincllas Northeast Site, Area B. Corrective actions included long-term ground water remediation. In July 1998, non-aqueous phase liquids (NAPL) were discovered at the site. Removal of NAPL is necessary to complete long-term corrective actions identified in the EA. An environmental checklist was prepared to determine if the scope of the short-term NAPL removal was within the scope of the EA. Following a DOE-ID and Grand Junction Office NEPA Planning Board meeting in October 2002, the DOE determined that the EA is adequate, however it is appropriate to amend the FONSI. DOE expects the amended FONSI to be completed in early February 2003 at a cost of approximately $3,000.

3. ACTIONS FOR WHICH ENVIRONMENTAL ASSESSMENT (EA) PREPARATION IS PLANNED TO BE INITIATED IN THE NEXT 12 MONTHS.

Ground Water Compliance at the Green River, UT, UMTRA Site (not yet assigned)
An EA Determination is pending. However, it appears that an environmental assessment may be required for this site to select the ground water compliance strategy. The EA would be tiered to the *Final Programmatic Environmental Impact Statement for the Uranium Mill Tailings Remedial Action Ground Water* Project (October 1996). The EA would comply with ground water standards as set forth in 40 CFR 192. The EA is tentatively planned for initiation in April 2003, Completion of the EA is planned for November 2003 at an approximate cost of $20,000.

Coal-Fired Steam Generation Facility
The DOE Idaho Operations Office is considering leasing buildings and equipment associated with an unused steam generation 'facility on approximately 15 acres of land at the INEEL to the Eastern Idaho Community Reuse Organization (EICRO). EICRO intends to rehabilitate and operate the premises to promote economic development, conduct research and development authorized by DOE authorities, and produce commercial electric power, EICRO will seek proposals from qualified applicants to convert the steam generation facility to enable electric power generation using private funds. The applicants will be private companies that have the capability from both technical and financial aspects to successfully complete the conversion. The applicants must demonstrate a willingness to cooperate with INEEL in conducting research compatible with the operation of the facility, such as clean coal, biomass firing.

The lease is contingent upon completion of NEPA and EICRO till cooperate with DOE by providing needed information, DOE will identify what information is required to comply with NEPA in completing an EA. EICRO will, at its expense, provide this information to DOE. DOE anticipates the preparation of the EA to start in October 2003 and be completed in March 2004. The cost of the EA is not known at this time,

Remote Treatment Facility
The proposed action is to construct an addition to the existing Hot Fuel Examination Facility at Argonne National Laboratory-West (ANL-W). The addition would include a shielded hot cell with equipment for sorting, characterizing, treating and repackaging highly radioactive transuranic, mixed, and other radioactive waste. The facility mission is to make "remote-handled" radioactive wastes ready for shipment to disposal. Much of the proposed action was analyzed in the DOE Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Final

Environmental Impact Statement (DOE/EIS-0203-F) as the Remote Mixed Waste Treatment Facility project. Notice of Intent (to prepare an EA) letters were mailed to Sate of Idaho and Shoshone-Bannock Tribal contacts in January of 2001, The draft EA is ready to be sent to the public for comment, but awaits approval of mission need decision (CD-O) from DOE headquarters, The CD-0 decision is anticipated in early CY 2003. The completion of the Final EA is scheduled for approximately four months after the CD-O decision, ANL-W personnel wrote the majority of the draft EA. The total cost of the NEPA process is estimated to be $150,000.

INEEL Subsurface Geosciences Laboratory

DOE-ID is proposing to construct a ***Subsurface*** **Geosciences** Laboratory to enable research that would improve understanding of fate and transport of contaminants in the subsurface. The proposed laboratory would house advanced subsurface research support facilities and equipment, including meso-scale experiments. Because of their size (in some cases exceeding 1,000 cubic meters), complexity, and the need to use actual DOE contaminants, meso-scale experiments for subsurface geoscience research require specialized facilities that currently do not exist in the DOE complex. On January 4, 2002, the DOE-ID manager signed a determination to prepare this EA. This project is currently at the concept stage. If the EA results in a Finding of No Significant Impact, construction would not begin until 2006. Depending on availability of funds, BBWI will continue: preparing this EA at an estimated cost of $90,000.

Update of the 1994 Idaho Research Center Environmental Assessment

DOE is planning to update the Idaho Research Center primarily to modify the existing radiological use limits to levels consistent with university and industrial standards. The revised EA will clarify protocols and expand the radiological requirements in the 1994 EA for the research center as well as update the scope of activities performed in Idaho Falls facilities. The proposed limits will add greater flexibility for research involving radionuclides, and promote acquisition of new research projects, while maintaining the research center as a "non-radiological facility," Due to the transition of DOE-ID from an Environmental Management lead lab to a Nuclear Energy lead lab, DOE has delayed work on the EA until at least mid-summer 2003 to consider any change of activities resulting from this lead lab transition. The cost has not yet been estimated.

Nuclear Regulatory Commission NEPA Review

In addition to anticipated DOE actions at the INEEL that warrant NEPA review, the Nuclear Regulatory Commission has separate NEPA authority over NRC-licensed activities forming a part of the INEEL mission. These activities currently include the Three Mile Island Unit 2 (TMI-2) Independent Spent Fuel Storage Installation (ISFSI) licensed under materials license SNM-2508 (located on the INTEC site) and the Fort St. Vrain ISFSI licensed under materials license SNM-2504 (located near Platteville, Colorado). NRC evaluates changes in or exemptions from license conditions/regulations under NEPA, such as recent security upgrades at the Fort St. Vrain fuel storage facility, Such NEPA reviews/actions are anticipated to continue to occur (though infrequently) in the future as NRC regulatory requirements evolve.

In addition, Foster Wheeler Environmental Corporation submitted a license application (Docket #72-25) to the NRC on November 19, 2001 for a spent fuel storage facility to be constructed on the INEEL. The facility will be owned and operated by Foster Wheeler under a privatization contract with DOE-ID. Issuance of the license by NRC (Foster Wheeler will be the licensee) will be supported by preparation of an EIS to be issued as a Final EIS in the second quarter of CY 2004. Issuance of the license (planned in CY 2004) constitutes the equivalent of the DOE Record of Decision.

4. ACTIONS FOR WHICH ENVIRONMENTAL IMPACT STATEMENT PREPARATION IS PLANNED TO BE INITIATED IN THE NEXT 24 MONTHS.

None

5. EVALUATION OF WHETHER A SITE-WIDE ENVIRONMENTAL IMPACT STATEMENT WOULD FACILITATE FUTURE NEPA COMPLIANCE EFFORTS.

DOE-ID has reviewed actions analyzed in the DOE Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Final Environmental Impact Statement that were generally deferred in the May 1995 ROD. There are 49 separate actions or proposed projects analyzed in that environmental impact statement. The impacts of each of these actions are analyzed separately in project summaries and in total in the cumulative impacts section of the EIS. The record of decision deferred implementing a number of the actions, stating, in general, that implementation decisions will be made in the future pending further project definition, funding priorities, and any further review under the Comprehensive Environmental Response, Compensation and Liability Act or NEPA.

In 2000, the Idaho Operations Office began preparation of a supplement analysis to compare the projects in that EIS with updated INEEL plans and prevailing environmental baseline conditions. The supplement analysis is used as a basis for determining (a) whether the environmental impact statement record of decision should be amended; (b) whether a supplemental EIS or a new EIS ehould be prepared; or (c) that no further NEPA review is required. The supplement analysis was completed in September 2002 and has been made available! to tie public, DOE determined that neither a new &IS nor a supplemental EIS needs to be prepared, but a site-wide groundwater analysis (composite analysis) needs to be completed before certain actions can proceed. Based on the supplement analysis, DOE has determined that at present, an additional or supplemental site-wide EIS would not facilitate future INEEL NEPA compliance efforts,

6. ENVIRONMENTAL IMPACT STATEMENTS AND ENVIRONMENTAL ASSESSMENTS COMPLETED IN 2001.

EA for Geomorphic Investigations of the Big Lost River at Site BLR-8 on the Idaho National **Engineering** and **Environmental Laboratory DOE/EA-1448**

In the course of preparing a floodplain determination for the INEEL in accordance with DOE orders, floodplain regulations and permitting requirements, DOE proposed trenching several sites along the Big Loet River (BLR). The purpose of the trenching was to determine past flood Bow characteristics of the Big Lost River by examining erosion and deposition exposed on the walls of the trenches. One of the sites, BLR-8, was eligible for listing on the National Register of Historic Places and is culturally important to the Shoshone-Bannock Tribes. As a result, &tailed archeological test excavations were conducted and an EA was prepared. A draft EA was released for public comment from August 13 to September 13, 2002. DOB reviewed the potential environmental impacts analyzed in the EA, considered public comment, and consulted with the Shoshone-Bannock Tribes and Idaho State Historic Preservation Officer, After it was determined the adverse impacts to cultural resources at BLR-8 could be mitigated, DOB decided an environmental impact statement was not required and issued a finding of no sign&ant impact on September 20, 2002. DOE initiated the proposed action described in the EA on September 23, 2002 and completed the action the following day.

7. DOE NEPA REVIEWS IN PROGRESS OR PENDING, WHICH CONSIDER THE INEEL IN THE PROPOSED ACTION OR ALTERNATIVES.

1. DOE and the United States Air Force will act as co-leads in the preparation of an EA to analyze alternatives for the Removal, Transport, and Storage of Strontium 90 Radioisotopic Thermoelectric Generators (RTGs). This EA will address: 1) the removal and transport of ten Strontium 90 (^{90}Sr) RTGs from Burnt Mountain Seismic Array Observatory in Alaska to either a designated site within the DOE Complex or an Air Force trans-shipment site, and 2) the selection of a DOE long-term storage site for these ten RTGs as well as up to 50 other Strontium 90 RTGs located throughout the United States. The retrieval of the Alaskan RTGs and the selection of a storage site is one component of DOE's efforts to recover all excess and unwanted RTGs and store them in a safe and secure manner pending development of a licensed disposal site. (The INEEL will be considered in the EA as an alternative storage site for RTG's).
2. Dispoeition of Scrap Metals Programmatic EIS (May affect disposition of INEEL scrap metal).